

# Development Department

## Research Programme

### Research Findings No. 110

## The Role of Transport in Social Exclusion in Urban Scotland

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Social exclusion reflects the existence of barriers which make it difficult or impossible for people to participate fully in society (Social Exclusion Unit, 1998). Previous work has indicated a paucity of data on the link between transport and social exclusion and this research was commissioned to better understand the role that transport plays in social exclusion in urban areas. The research involved detailed surveys in 3 urban areas in Scotland, and from information gathered from household interviews, focus groups and travel diaries, appropriate strategies were identified to improve accessibility to key destinations and to improve the quality of life for groups currently experiencing social exclusion.

### Main Findings

- Women, the unemployed, the elderly, people with health problems and those in low income groups are more likely to experience transport related social exclusion.
- Excluded groups are heavily reliant on walking, public transport and on lifts from family, friends and neighbours.
- Lower income groups (gross household incomes below £100-£149 per week) spend more on fares for public transport than those in higher income groups.
- Regular car access is strongly associated with a higher income level (gross household incomes above £100-£149 per week), home ownership and lower levels of public transport use.
- The elderly and people with health problems were more likely to find it difficult to use buses, taxis and walk for at least 10 minutes.
- Two-thirds of respondents stated that the local bus service stop was less than 3 minutes walk away, although service frequencies were perceived to decline noticeably in the evenings and on Sundays.
- Over 90% of people stated that they like living in their neighbourhood, but those expressing a preference to move did so because of a poor local environment and a desire to improve housing circumstances. Only 5% stated they would move to improve transport links and accessibility.
- Reduced fares and budget ticketing were used by relatively low numbers of people.
- For those in employment, 15% stated that transport considerations had prevented them from looking for a job and 10% that these had prevented them from accepting a job offer.

## Introduction

The 1998 White Paper “Travel Choices for Scotland” stated a commitment to developing an integrated transport policy and the promotion of a fairer and more inclusive society. Previous work in this area had established that although the existence of a link between transport and social exclusion had been widely recognised, there was a lack of clear and reliable empirical data. The overall purpose of this research was to provide a better understanding of the role that transport plays in social exclusion in urban Scotland, in order to identify appropriate strategies to improve accessibility to key destinations and to improve the quality of life for groups experiencing social exclusion. The specific aims of the study were to:

- review existing empirical research on the contribution of transport to social exclusion
- examine the differential effects of transport ‘disadvantage’ on different groups in the population
- collect primary evidence on the nature of transport disadvantage in urban areas and to investigate its effects on exclusion
- identify and assess the available options for addressing the transport needs of socially excluded groups.

## Methodology

The methodology used in this study consisted of three stages:

### 1. Stage One: Review

A literature review and a series of focus groups and interviews were conducted as part of this developmental stage of the research. The literature review identified the main parameters of exclusion affected by transport and included a review of transport initiatives designed specifically to address issues of social exclusion; and the focus groups and interviews, conducted with local residents of four urban locations within the Central Belt, were used to identify the influence of (poor) transport in contributing to social exclusion in each of the selected areas. They also aimed to explore, as far as was possible, the problems experienced by different potentially disadvantaged groups such as those on low income, the long term unemployed, the elderly or the young, women and single parents.

### 2. Stage Two: Case Studies

The second stage of the research focused on three case study areas which were located in Leith (Edinburgh), Castlemilk (Glasgow) and Coatbridge (North Lanarkshire). The three areas were selected on the basis of their perceived transport links and the levels of transport deprivation, as well as their socio-economic profile. The case study of each area involved three distinct stages:

- a household survey which was then used to quantitatively examine the experiences of different groups (in a local area context) and explore the nature of transport disadvantage in the different areas.
- a Travel Diary study and interviews designed to explore more fully the factors that either determine or contribute to transport disadvantage.
- assessment of the transport provision made in each of the three areas to explore the differences between perceptions and actual transport provision.

### 3. Stage Three: Potential Solutions

The third stage involved consultation with the key transport providers of the selected case study areas in order to explore potential solutions to problems identified.

## Research Findings

The data collected in the household survey produced information on the travel behaviour and attitudes towards different modes of transport for respondents in the different case study areas. Taking the different dimensions of social exclusion this section identifies those groups that are more likely to experience transport disadvantage and as a consequence transport related social exclusion.

### Physical exclusion

This dimension of exclusion relates to physical barriers that inhibit accessibility to services. Data from the household survey indicates that physical barriers impact to a higher degree on the elderly and people with health problems. Significant difficulties were experienced where travel involved walking and standing for at least 10 minutes. Reported difficulties were also found when using taxis and boarding buses. Disabled people, especially those

with chest/breathing difficulties and a disability connected with the arms and legs, also experienced physical exclusion. No differences between the location of local support networks and age or health were found. Respondents across all categories indicated that they could rely on friends and family to help them in a variety of situations.

Lower levels of car access were found to exist amongst the elderly and disabled. Many have had their licence suspended on health grounds or are disqualified from driving.

### Geographical exclusion

Poor transport provision and resulting inaccessibility can create patterns of exclusion. Geographical exclusion may be felt to a greater degree by residents in localities on the edge of a city/town or a free standing town where access to a car is non-existent or where there is a reliance on lifts. In Coatbridge, a free standing town where bus services are relatively poor compared to the other two case study areas, there is a greater reliance on the car even for making trips within the neighbourhood. Evidence also indicates a greater diversity of activity patterns and mode choice in this area.

The study found that women are less likely to have held a driving licence, both full and provisional, and

are as a result more likely to use local bus services and rely on lifts. Men were more likely to have regular car access whereas women are more likely to have no access at all to a car. Reliance on lifts in a car is also a feature of travel for those with health problems and this may be a more workable solution for meeting individual mobility needs where local support networks are in place, i.e. in circumstances where it is relatively easier to obtain lifts in the car from friends and family.

The research confirmed a correlation between tenure and car access. Respondents who pay rent in the public and private housing sector are less likely to have access to a car at all (table 1). It may, therefore, also be the case that lack of access to a car and lower income can geographically restrict housing choices. A significant proportion of respondents in the survey, in each study area, stated that they would like to move to improve their housing circumstances, but also because of a combination of noise, neighbours and the poor environment.

For those in employment, a small proportion of respondents had stated that transport considerations had prevented them from accepting a job offer. This was also the case for those seeking work and in full-time education. In Leith and Castlemilk, a greater proportion of respondents stated that they would move to improve transport links and accessibility.

**Table 1 Tenure and Access to a Car, % of respondents.**

Tenure	Car access			Total
	Regular car access	Relying on lifts	No access at all	
pay rent - local authority	14%	32%	22%	24%
pay rent - housing association	5%	15%	26%	12%
pay rent - private landlord	6%	8%	11%	7%
own it outright	22%	16%	16%	18%
buying it with the help of a mortgage or loan	47%	17%	16%	29%
live here rent free	6%	11%	9%	9%
other	0	1%	0	1%
Total	100%	100%	100%	100%

## Exclusion from facilities

Exclusion from facilities can occur where the distance of facilities from people's homes, especially for those without a car, can make access difficult. Evidence indicates that low income groups and women are more likely to suffer from this type of exclusion where access to facilities is made easier - or even only possible - through car use. For trips within the neighbourhood, evidence from the survey indicates that walking is a dominant mode of transport, although there are circumstances where travel by car accounts for a higher share of trips even within the neighbourhood. Car use rises for trips to out of town retail facilities, hospital, bank and doctor (table 2). There are, however, high levels of public transport use for these activities as well, but travel times are lower for those who can access the car.

Respondents without a car tended to go less frequently to retail shopping park facilities and on trips to visit friends. Differences by gender are less marked on these trips. Lower income groups are, however, more likely to make regular grocery trips, whereas those on higher incomes made less trips per week.

The analysis demonstrated a strong link between the local neighbourhood and the pattern of mode choice in each case study area. Respondents chose 'local neighbourhood' as the most frequent response for location of key facilities that they accessed. Journey time was inter-related with mode choice and location. In the local neighbourhood, walking dominated travel patterns within Leith and Castlemilk. In Coatbridge, compared to Leith and Castlemilk, the analysis showed a greater tendency of the respondents to use the car and bus for local neighbourhood journeys. Also in Coatbridge, respondents accessed goods and services in the city centre by these modes. This fits with the findings regarding car use and ownership where the highest proportion of licence holders driving everyday resided within Coatbridge. Coatbridge also had the highest proportion of car ownership compared with the other two case study areas. Castlemilk had the highest proportion of respondents who never drive, and Leith had the highest proportion of licence holders but the lowest proportion of respondents who drive regularly.

**Table 2 Percentage of respondents using mode to access facilities**

	* % of respondents					
	Car (driver)	Car (passenger)	Walk	Bus	Taxi	Never use
Local shop	10	3	74	9	1	2
Post Office	9	2	77	6	1	3
Supermarket	22	9	36	25	3	2
Bank	17	5	38	28	2	8
Doctor	17	6	42	25	5	3
Chemist	11	4	67	12	1	3
Dentist	17	4	40	21	2	14
Sports/leisure centre	14	3	26	14	1	41
Cinema	16	9	8	28	4	33
Pub	2	2	32	13	8	42
Library	10	3	46	11	1	27
Church	6	5	41	5	1	41
Hospital	22	11	3	43	9	10
Local government office	8	3	14	21	1	53

\* percentages may not add up to 100 due to rounding off of figures

**Table 3 Bus expenditure per week and household income**

Bus expenditure per week	Household income			Total
	Under £7,700	£7,800-15,500	£15,600 or more	
Less than £2.40	38%	41%	33%	37%
Over £2.40	62%	59%	67%	63%
Total	100%	100%	100%	100%

### Economic exclusion

Economic exclusion refers to the high monetary or temporal costs of travel that can prevent or limit access to facilities or jobs and thus income. Car use is strongly associated with higher income levels, whereas lower income groups are more reliant on walking, public transport and on lifts. Public transport use and reliance on lifts were generally found to result in longer journey times. A greater proportion of those on lower incomes pay over £2.40 per week for bus fares than those on higher incomes. This means that, relative to other income groups, people in lower income groups can pay more for their public transport in terms of their income and also have longer travel times when accessing the same range of goods and services as those in higher income groups. Fuel expenditure on cars is, as would be expected, higher amongst higher income groups.

Single parent families and single person households were found to account for a significant proportion of those within lower income groups. It is these groups that are likely to feel the adverse consequences of reliance on public transport the most. In this survey, nearly a quarter of respondents stated that they were worried about money almost all the time. There was little evidence of those on lower incomes paying reduced fares or making use of season tickets.

### Time based exclusion

There was little evidence from the household survey of time based exclusion. Nonetheless, evidence on time taken to access facilities, especially for those journeys outwith the neighbourhood and to facilities in relatively remote locations such as hospitals and out of town shopping facilities, indicated that time spent travelling is higher especially for those trips made by bus. It is therefore clear that bus users - who are

more likely to be people on lower incomes, women, the disabled and the elderly - are spending longer to access particular goods and services, especially those outside their local neighbourhood.

Access to a car makes journey times lower but at the same time gives more flexibility in terms of the choice of location at which to access particular goods and services.

The perception of bus service frequency corresponds with the view that reliance on public transport makes it more difficult to access particular facilities especially during week day evenings and on Sundays. Access to bus stops was high with a significant proportion in each case study area stating that the bus stop that was used most often was within a six minute walk (over 80% in each case study area). Access to the bus stop is, however, problematic for the elderly and those with a disability. Taxis were not widely used by the elderly but tended to be used more frequently by those on higher incomes and in younger age groups.

### Fear and space based exclusion

Fear based exclusion refers to circumstances where worry, fear and even terror influence how public spaces and public transport are used, and space exclusion refers to situations where security and space management strategies can discourage socially excluded individuals from using public transport spaces. Analysis has revealed a significant link between gender and concerns about personal safety after dark where the overwhelming majority with this concern were female, and this concern was also linked to people suffering from visual disability. There was also limited evidence from the survey that concerns about personal safety and the quality of the

local neighbourhood were contributory factors in reasons why respondents wanted to move from the area. There was little other evidence from this survey to suggest that the way public space and public transport services are managed contributes to fear and space exclusion. This does not necessarily mean that these are not important aspects of social exclusion in these case study areas but may be indicative of avoidance strategies and coping behaviour.

### Restrictions in use of public transport

Respondents were asked if they felt their travel by public transport was restricted by any (number) of the following reasons. The percentages of respondents answering yes to these are listed below:

- 44% because of concerns about personal safety after dark
- 32% due to lack of information about public transport
- 30% due to the routes served
- 29% due to the times of services
- 26% due to the reliability of services
- 21% felt they had difficulty in travelling with prams or buggies
- 19% due to the cost of fares
- 18% because of the lack of facilities for children
- 17% felt they were unable to board vehicles easily or safely
- 7% because of concerns about personal safety during the day

Restrictions on public transport travel was found to differ little in terms of car availability.

## Conclusions

This research set out to explore the extent to which transport contributes to social exclusion. Clearly, different groups within reach of the urban case study areas suffer transport related social exclusion to a certain degree -

- disabled people and the elderly suffer from physical exclusion from transport services
- residents who have no access to a car or rely on lifts and who live in localities on the edge of a city, suffer a degree of geographical exclusion
- low income groups and women are more likely to suffer exclusion from facilities
- people on lower incomes (particularly single parents and single people) suffer from economic exclusion and pay more for their public transport in terms of their income
- bus users, who are more likely to be people on lower incomes, women, disabled people and the elderly, travel longer times to access goods and services and may suffer from time based exclusion
- women and disabled people tend to suffer from fear and space based exclusion, having concerns about personal safety when travelling, especially after dark

However, the research also found that public transport provision in two of the case study areas was good and that people can access many facilities on foot. Many people who cannot access facilities have friends and neighbours to help out, and most of the respondents reported liking where they lived. Transport therefore does have a role to play in contributing to social exclusion, particularly for certain groups, and improvements to transport services and provision can help to promote social inclusion. However, transport is only one contributory factor in a myriad of factors affecting people's ability to participate fully in society.

## Recommendations

The consultants made a number of recommendations based on this research for improving transport provision for excluded or disadvantaged groups. These were in the areas of

- subsidies and concessions
- public transport operations
- community and specialised transport operations
- fares and ticketing arrangements
- provision of public transport in new developments
- provision of cycling and pedestrian infrastructure

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